

# START

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Environmental Protection  
Agency

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Hanford Project Office  
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Richland WA 99352

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9201732



January 10, 1992

J. C. Langford  
2202 Frankfurt  
Richland, Washington 99352

Re: Comment Response on the "Expedited Response Action Proposal  
for 200 West Area Carbon Tetrachloride Plume"

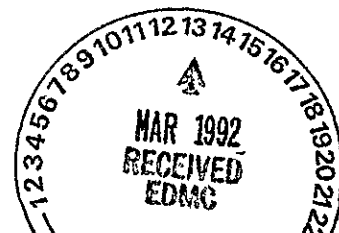
Dear Mr. Langford:

Thank you for taking the time and effort to review and comment on the 200 West Area Carbon Tetrachloride Plume Expedited Response Action Proposal. Your primary comments appear to question the format of the proposal, the need to take a cleanup action for carbon tetrachloride, and the potential application of residential cleanup standards to the 200 West Area. I realize you have many other specific comments, but these comments do not appear to influence the approach or implementation of the carbon tetrachloride cleanup action.

Your comment about document format questions the content and scope of the proposal. The proposal submitted to public comment is in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended and with 40 CFR 300, Subpart E.

Another of your primary comments addresses the need to take the proposed cleanup action. One reason for proceeding with this action is to reduce the existing and potential exposure of well drillers and other field sampling personnel to carbon tetrachloride vapors. Currently, workers drilling and sampling in these areas are required to wear supplied air systems to limit exposure to these vapors. With additional characterization and cleanup efforts to be initiated soon in the 200 West Area, reducing the exposure of the workers is very desirable. Secondly, this action is expected to limit the future spread of groundwater contamination by limiting the migration of carbon tetrachloride vapors. The amount of carbon tetrachloride disposed to these three sites has the potential to impact the water quality of the entire unconfined aquifer which is a permitted resource of the State of Washington.

In regards to your concerns over the application of residential cleanup standards to the 200 West Area, these concerns are inaccurate. This action is not taken for the purpose of achieving final cleanup standards. This action is taken for the purpose of mass reduction. Cleanup standards for carbon tetrachloride in the 200 West Area will be established



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only after a final Record of Decision (ROD) is written for the involved operable units. These cleanup levels will be based on the projected future use of the site and the cost effectiveness of potential remedial alternatives. One thing is certain, and that is, cleanup of carbon tetrachloride vapors in soil is much more cost effective than cleanup of contaminated groundwater.

Thank you again for your comments and involvement in the Hanford cleanup process.

Sincerely,



Douglas R. Sherwood  
Environmental Engineer

cc: Administrative Record (200 Area Carbon Tetrachloride)

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DDE/RL-91-32 Draft B  
Expedited Response Action Proposal  
(EE/CA&EA) for 200 W. Area Carbon  
Tetrachloride Plume

Comments "Public" 17946  
J.C. Longford  
2202 Frankfort  
Richland, Wa

p1 Where is the Summary statement? The NIH (I understand) was recently sued for failing to provide a summary statement of conclusions - I think you may also have a political problem here. It is very poor (unsatisfactory) science to conceal information from the public by making them read this entire article to draw correct conclusions. It is a clue you are wasting our money, line 2 - how do you define "unsaturated" soils? Is this "normal soil"?

under 1.3 ERA Background

The EPA has deliberately defined contamination levels at health standards levels like in cities. Is it cost effective to require such stringency for isolated areas (other than for political purposes)? I hope to see some common sense applied to non-habited areas. My data, for example, has California regulating citations at below natural levels.

p8 under 2.4 Extent of Contamination line 4 The conventional method of expressing parts per million is PPM, not p/m. You also give only max values (not the more useful average concentrations). Detection is now so low as to be meaningless as far as health hazard.

Last paragraph, midline the 7,340 parts per billion is equal to ~~7.34~~ parts per million. You are using big numbers to be impressive, I think.

p9 under 2.5 Since you are using conceptual models, I assume you don't really know much about the contamination.

p11 under 3.1 have you ever agreed to a scientific no-action or is this unacceptable? Why the immediacy in a non-habited area? Is this political justification or scientific need?

(over)

p 11 under 3.2 last paragraph  
You agree that limiting access protects human health  
- so it is no health problem.

p 13 I hope you will discuss this migration in terms of dilution  
to show how low the concentrations become where they are  
insignificant. Zero concentration is, of course, not  
publicly acceptable because of cost. Draw the common sense  
line somewhere.

p 14 last line under 3.3.1.2 Poorly written sentence.  
Probably means that the distribution of contamination  
makes Freezing or Slurry Trench/Walls impractical.

p 19 under 4.1.1 1st line DNAPL is not defined.  
last paragraph, 2nd line - Do you really expect  
plutonium and americium to exist in this environment as  
metals - you are really reaching for an explanation (very poor).

p 23 under 4.2.2.3 paragraph two You should be able to obtain data  
on natural uranium migration due to steam from oil field work.

p 25 4.3.1 The fact you are breathing is, in fact, an ozone-depleting  
process - surely you have better criteria. Sounds amateurish then  
lack of definition. You also contribute to the greenhouse effect.

p 29 under 4.5.3 Although the carbon tetrachloride seems to be  
doing absolutely no harm - perhaps only the more productive  
wells could be cleaned down to maybe 100 PPM w/o wasting  
too much money.

under 5.0 - you have already admitted there is no health hazard so the only criteria is the synthetically generated compliance regulations. For the real requirements - see the last sentence on the page, i.e. Best Available control technology is really based on opinion and geo levels which aren't reasonable. Needs an individual educated in common sense.

p35 Table 7 item 2 Regulation sets radiation exposure at 1000 th of yearly natural exposure (much less than an airplane ride to Denver). Purposely set excessively low.

What the Table really demonstrates is extreme overlap of government regulations w/o consistency or simplicity.

p36 Same Table 8 as for Table 7

p37 Third paragraph - Detection capability - use of 6 chromatograph shows implied need to find at very many factors of 10 below human health hazard and excessive control.

Last paragraph suggest possible cure (in removing natural radon) is more dangerous than the treatment, although I see no real hazard. Are we seeking a cure or wanting to perform a test?

p38, p39 I can't see how you arrive at too high Carbon Tetrachloride vapors in the air assuming that it is underground. Obviously you have no supporting, measured data for this. It must be generated via the SCREEN model. The public will be confused by your assuming vapor concentrations in the air due solely to operation of the clean up system.

p43 paragraph two - says that the above concentrations were calculated, not measured. See also 1st paragraph - p47 - no hazard.

pB-43 Carbon Tetrachloride vapors at best appear to be 5-15 PPM and on pB-45 appear to be emitted only at low barometric pressure (i.e. under stormy conditions). Per page B-51 soil carbon tetrachloride concentrations are most not detected.

p. after A-8 The Site Evaluation report of V. J. Roney & V. G. Johnson, Geosciences Group, W.H.C. appears to accurately portray Hanford Site information. Well-written, honest and non-political.

The rest of this Action Proposal is supporting data. The real justification for doing the work appears to me to be to see if it can be done - not for health hazard nor should it really be justified through excessively designed regulatory requirements. The real summary should be put up front in plain English and not be based on conservative carbon tetrachloride levels. There is enough data to present reasonable averages that describe the real situation.

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Subject: COMMENT RESPONSE ON THE "EXPEDITED RESPONSE ACTION PROPOSAL FOR 200 WEST AREA CARBON TETRACHLORIDE PLUME"

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